

REMARKS

Claims 1, 3-6 and 8-40 are pending in the application. Claims 11-40 have been held withdrawn as being drawn to a non-elected invention. Claims 1, 3-6 and 8-10 have been amended. Claims 2 and 7 have been canceled without prejudice or disclaimer. Reconsideration of this application is respectfully requested.

In response to the restriction requirement, the provisional election of of the group I claims 1-10 is affirmed.

The Office Action rejects claims 1-5 under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,738,531 to Beaman et al., hereafter Beaman. This rejection is moot as to claim 2, which has been canceled.

Independent claim 1 has been amended to recite an electrically insulating carrier, an electrically conductive via disposed in the carrier and a hollow body of electrically conductive material that is disposed in electrical contact with the via on opposite sides of the carrier. Beaman does not disclose the combination of an electrically conductive via and a hollow body as claimed.

Independent claim 1 has been further amended to recite that the hollow body has at least one surface void. Beaman does not teach a hollow body or a hollow body with a surface void disposed in electrical contact with a via on opposite sides of the carrier.

For the reason set forth above, it is submitted that the rejection of claims 1 and 3-5 under 35 U.S.C. 102(b) as anticipated by Beaman is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 1-5 under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 4,528,500 to Lightbody et al., hereafter Lightbody. This rejection is moot as to claim 2, which has been canceled.

Independent claim 1 has been amended to recite an electrically insulating carrier, an electrically conductive via disposed in the carrier and a hollow body of electrically conductive material that is disposed in electrical contact with the via on opposite sides of the carrier. Lightbody does not disclose the combination of an electrically conductive via and a hollow body as claimed.

Independent claim 1 has been further amended to recite that the hollow body has at least one surface void. Lightbody does not teach a hollow body or a hollow body with a surface void disposed in electrical contact with a via on opposite sides of the carrier.

For the reason set forth above, it is submitted that the rejection of claims 1 and 3-5 under 35 U.S.C. 102(b) as anticipated by Lightbody is obviated by the amendment and should be withdrawn.

The Office Action rejects claims 6-10 under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,924,875 to Tighe et al., hereafter Tighe. This rejection is moot as to claim 7, which has been canceled.

Independent claim 1 has been amended to recite that the hollow body has a surface void. Tighe's bumps 15 or 17 do not have a surface void. The openings labeled "O" in the Office Action attachment are not surface voids, but rather are merely openings of the via encompassed by bumps 15 and 17.


For the reason set forth above, it is submitted that the rejection of claims 6 and 8-10 under 35 U.S.C. 102(b) as anticipated by Tighe is obviated by the amendment and should be withdrawn.

The Office Action cites a number of patents that were not applied in the rejections of the claims. These patents have been reviewed, but are believed to be inapplicable to the claims.

It is respectfully requested for the reasons set forth above that the rejections under 35 U.S.C. 102(b) be withdrawn, that claims 1, 3-6 and 8-10 be allowed and that this application be passed to issue.

Respectfully Submitted,

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